



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Re: Application of: **Stefan BEICHL**
Serial No.: 10/540,203 Confirmation No.: 6597
Filed: August 17, 2005
For: **SEALING ARRANGEMENT**
Examiner: Gilbert Y. LEE Art Unit: 3673
Customer No.: 23280
Atty. Docket: 5038.1004

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 21, 2010

APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41

Sir:

Appellants submit this Reply Brief for consideration of the Board of Patent Appeals and Interferences (the "Board") in response to the Examiner's Answer dated February 22, 2010 and in support of their appeal of the Final Rejection dated March 13, 2009. Appellants respectfully reassert each of the arguments asserted in Appellants' Brief dated October 27, 2009, and provide herein only a rebuttal of several of the arguments raised in the Examiner's Answer. No fee is believed required. If any fee is required at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

ARGUMENTS

The following additional remarks are submitted for consideration by the Board under 37 CFR §41.41.

A. Rejections under 35 U.S.C. §103(a)

Claims 20 to 23, 25, 27, and 30 to 36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Turnquist et al (US Patent 6,105,967) and in view of Kono (US Publication No. 2002/0140174).

In his answer at page 13, the Examiner relies on Kono for the claimed “one first sealing device including an annular seal . . . wherein the annular seal is a metallic piston-ring seal having a separation site”, pointing to the alleged “splits shown by faces 3D”. However, the referenced seal of Kono is a brush seal, not an annular seal. Thus, the “splits” shown in Kono cannot provide the claimed separation site of the annular seal. A brush seal is not the same as an annular seal. Indeed, paragraph [009] of the present specification explains:

Due to the fact that, in addition to the at least one first sealing device designed as an annular seal, a second sealing device designed as a brush seal is arranged between the axially symmetrical components, non-uniformities in the radial gap between the axially symmetrical components to be sealed from one another are able to be compensated, thereby preventing leakage. The advantages of annular seals and brush seals are combined.

Further, a brush seal is certainly not a metallic piston ring seal, a specific type of annular seal. As set forth in the Amendment dated June 26, 2007, p. 6:

A piston ring seal is an adjustable split metal ring seal. The diameter is thus flexible. See [0039] and, for example, Answers.com: “piston ring n. An adjustable split metal ring that fits around a piston and seals the gap between the piston and the cylinder.”

It is respectfully submitted that a piston ring seal is a particular type of annular seal, regardless of whether or not it is used to seal a piston, or some other element. It is not a brush seal.

Reversal of the Examiner’s rejection of claim 20, and claims 21-23, 25, 27, and 30 to 36 is therefore respectfully requested.

Claims 26, 28, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Turnquist et al in view of Kono as applied to claims 20 to 23, 25, 27, and 30 to 36 above, and further in view of Beichl et al (US Publication No. 2004/0188943 A1). Claims 26, 28, and 29 depend, directly or indirectly, from claim 20.

In his Answer, the Examiner confirms that Beichl fails to disclose teach or suggest “at least one first sealing device including an annular seal; a second sealing device including a brush seal...wherein the annular seal is a metallic piston-ring seal having a separation site” as recited in claim 20 of the present invention. Consequently, it cannot cure the deficiencies in Turnquist and Kono discussed above in connection with claim 20, and the Examiner’s rejection should be reversed.

Claims 37 to 40 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Turnquist et al in view of Kono, and further in view of Hagle (US Patent No. 5,074,748). Like claim 20, claim 37 requires “at least one first sealing device including an annular seal . . . wherein the annular seal is a metallic piston-ring seal having a separation site.” As established above, neither Turnquist or Kono disclose this limitation. Hagle describes a seal assembly including a plurality of spline seals and a brush seal. As such, the addition of Hagle cannot cure the deficiencies in Turnquist and Kono discussed above. Reversal of the Examiner’s rejection is therefore requested.

Favorable consideration of this Reply Brief is respectfully requested.

Respectfully submitted,
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